

## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,130	12/08/1998	DANIEL VIERA CONRAD	RA9-98-053	6377
25299	590 10/15/2002			
IBM CORPO		EXAMINER		
PO BOX 1219 DEPT 9CCA,	BLDG 002	ROBINSON BOYCE, AKIBA K		
KESEARCH I	RIANGLE PARK, NO	21709	ART UNIT	PAPER NUMBER
			3623	
			DATE MAILED: 10/15/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

SK.

4	Application N .	Applicant(s)			
	09/207,130	CONRAD ET AL.			
Office Action Summary	Examin r	Art Unit			
	Akiba K Robinson-Boyce	3623			
The MAILING DATE of this communicati n appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on 30 J	<u>uly 2002</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi	s action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) <u>1-15</u> is/are pending in the application					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-15</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers					
9)☐ The specification is objected to by the Examiner					
10) The drawing(s) filed on is/are: a) accep		miner			
Applicant may not request that any objection to the					
	<u>_</u> '				
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
<ul> <li>a) The translation of the foreign language provisional application has been received.</li> <li>15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>					
Attachment(s)					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

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#### **DETAILED ACTION**

#### Status of Claims

In response to the communications received on 7/30/02, the following is a final office action. Claims 1-15 are pending in this application and have been examined on the merits. Claims 1-15 are rejected. The previous rejection mailed 4/23/02 has been repeated as follows.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binkley, et al (US Patent 5,088,033), in view of Weber (US Patent 5,812, 668).

As per claims 1, 2, 7, 8, 9, 14, 15, Binkley, et al discloses:

providing an emulation module.../providing an emulation object.../an emulation module.../an emulation object...(Col. 3, lines 34-37, Col. 8, lines 62-68).

ensuring that the application will utilize the emulation module.../ensuring that the application will utilize the emulation object.../means for ensuring.../wherein the application is capable of utilizing the emulation module in lieu of the device.../emulating the interaction...(Col. 6, line 66-Col. 7, line 4);

executing the application on the development system independently.../wherein the application is executed on the system, the emulation module and the application independently.../wherein the application is executed on the development system, the emulation module and the application emulate the interaction...(Col. 1, lines 60-62, Col. 1, line 66-Col. 2, line 1, Col. 2, lines 9-19, Col. 7, lines 32-38, [where the examiner is interpreting the "development system" and the "point of sale system" of the present invention to be analogous to the "host system" and "target system" of Binkley, et al);

ensuring that the application adequately utilizes the emulation object...(Col. 2, lines 9-13);

modifying the application...(Col. 1, lines 11-14, Col. 2, lines 13-19). allowing a developer to provide input...(Col. 50, lines 41-43); providing the input to the application in a form expected...(Col. 51, lines 3-17). Binkley, et al fails to teach the following, however, Weber discloses:

A point of sale system...(Col. 65, lines 54-63,w/ abstract, lines 1-11)

It would have been obvious to one of ordinary skill in the art for the device to be specialized for the point of sale equipment because the transactions that are being tested on a different computer in Weber (test gateway computer) are occurring in a pos environment. In this case, since transactions are occurring at a pos system, any device used at the pos must therefore be specialized or formatted to operate at the pos system.

As per claims 3, 10, Binkley, et al discloses: wherein the application is platform independent...(Col. 58, line 46-Col. 59, line 10).

As per claim 5, 12, Binkley, et al discloses:

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wherein the point of sale equipment includes a driver...(Col. 19, line 67-Col. 20, line 6).

As per claim 6, 13, Binkley, et al discloses:

wherein the emulation object emulates the driver and the device...(Col. 19, lines 11-15, Col. 19, line 67-Col. 20, line 6).

As per claims 4, 11, Binkley, et al fails to teach the following, however Weber discloses:

wherein the application is a JAVA application...(Col. 7, lines 15-17). It would have been obvious to one of ordinary skill in the art to make the application and the emulation object platform independent because in a computer environment, applications are constantly being changed around and depending on these changes and the needs of the user, the platforms will also need to change in order to fit the environment. It would have been obvious to one of ordinary skill in the art to make the application and the emulation object JAVA applications because JAVA is a common, distributed programming language that is simple and is used for object-oriented programming in the application development art.

## Response to Arguments

Applicant's arguments filed 7/30/02 have been fully considered but they are not persuasive.

As per claims 1, 7, 8, 14 and 15, the applicant argues that the combination of Binkley et al and Weber fails to disclose a method, system or computer readable medium that is used to emulate an interaction between an application and a point of sale system and that the emulation module used emulates devices that are particular to the point of sale system where the emulation is accomplished on a development system

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independent of the point of sale equipment. In particular, the applicant argues that "Binkley et al is directed very generally to emulation of system on which an application is to run" and that "Binkley appears to be directed at a system which provides a separate 'emulating processor' that allows the processor of the host system to continue normal operation an emulates the function of the target system. However, it is clear that Binkley et al discloses the emulation of an application and an "other" system or the target system. In Col. 2, lines 9-19, Binkley et al discloses that the emulating processor provides/receives its output/input signals to/from the host system (performing emulation) which allows the host system to run target system software where the host system is analogous to the development system of the present invention and the target system is analogous to the pos system of the present invention. Binkley shows that this emulation is done independently of the target system in Col. 2, lines 15-17 where Binkley et al recites "The host system continues to operate as an independent system while supporting emulation...". In addition, Col. 2, lines 11-21 of Binkley et al discloses that the emulating processor is capable of running target system software and independently supports emulation of the target system as if the target system were running the software where the software is analogous to the application of the present invention. In addition, Col. 3, lines 32-40 describe the emulation of an I/O operation. This emulation of an I/O operation is analogous to the emulation of an I/O device that is to be used on the target system.

The applicant also argues that Binkley et al fails to discloses a point of sale system and can find no mention of any mechanism for developing applications for a

point of sale system or for emulating a device that is part of, or specially designed for, a point of sale system. As described above, Binkley et al discloses the development of applications and the emulation of a device for an "other" or target system. In addition, Binkley et al discloses emulating devices that may be used in conventional computer systems. However, the pos system is a computer system, therefore, the analogy between the devices of the target system and the pos system is valid. To specifically show that emulation can be performed in a pos environment the combination of Binkley et al and Weber was presented. This combination teaches that the emulation is capable of being executed in a pos environment. Specifically, Weber discloses a system where the test gateway is used with a generic pos system for a merchant located at the actual pos system in order to verify the operation of the actual pos system or remote transaction clearance system. In this system, transaction responses that come from the gateway computer include configuration data that can be used by the merchant-operated computer to configure itself to access a production gateway computer. In this case, the production computer represents the pos system or the present invention, the merchant-controlled computer represents the development system of the present invention, the simulated transaction responses that include configuration data for the merchant-controlled computer represent the emulation element and the test gateway computer represents the emulation environment. Even though the test gateway does communicate with the actual pos system as argued by the applicant, the Weber reference was not cited to prove that the development system can be independent of the point of sale system. This feature was met in the Binkley et

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al reference as discussed above. Instead the Weber reference was combined with the Binkley et al reference to show that .cited to prove that emulation can occur in the pos environment. The applicant argues that the test gateway of Weber does is not used in developing an application for the point of sale system or used in developing the components of the point of sale system or emulating any interaction between an application and a device that is part of a point of sale system. However, Weber specifically discloses that his invention relates to the field of banking where an Internet payment solution, which emulates existing Point of Sale (POS) applications that are currently installed on host computers, is needed (See Col. 3, lines 48-50). Weber's solution to this problem involves a system where the test gateway is used with a generic pos system for a merchant located at the actual pos system in order to verify the operation of the actual pos system or remote transaction clearance system. As already discussed above, the emulation environment is analogous to the test gateway computer since this computer responds with configuration data that is used by the merchantoperated computer to configure itself to access a production gateway computer (in this case the merchant-operated computer is being emulated to the production gateway computer environment. This emulation constitutes the development of an application or component on an "other" system and also the emulation of any type of devices related to the other system.

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Claims 2-6 depend form independent claim 1 and are rejected for the same reasons as discussed with respect to claim 1. Similarly, Claims 9-13 depend form

independent claim 8 and are rejected for the same reasons as discussed with respect to claim 8.

### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 703-305-1340. The examiner can normally be reached on Monday-Friday 8:30 am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

O.R.B

October 10, 2002

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3600